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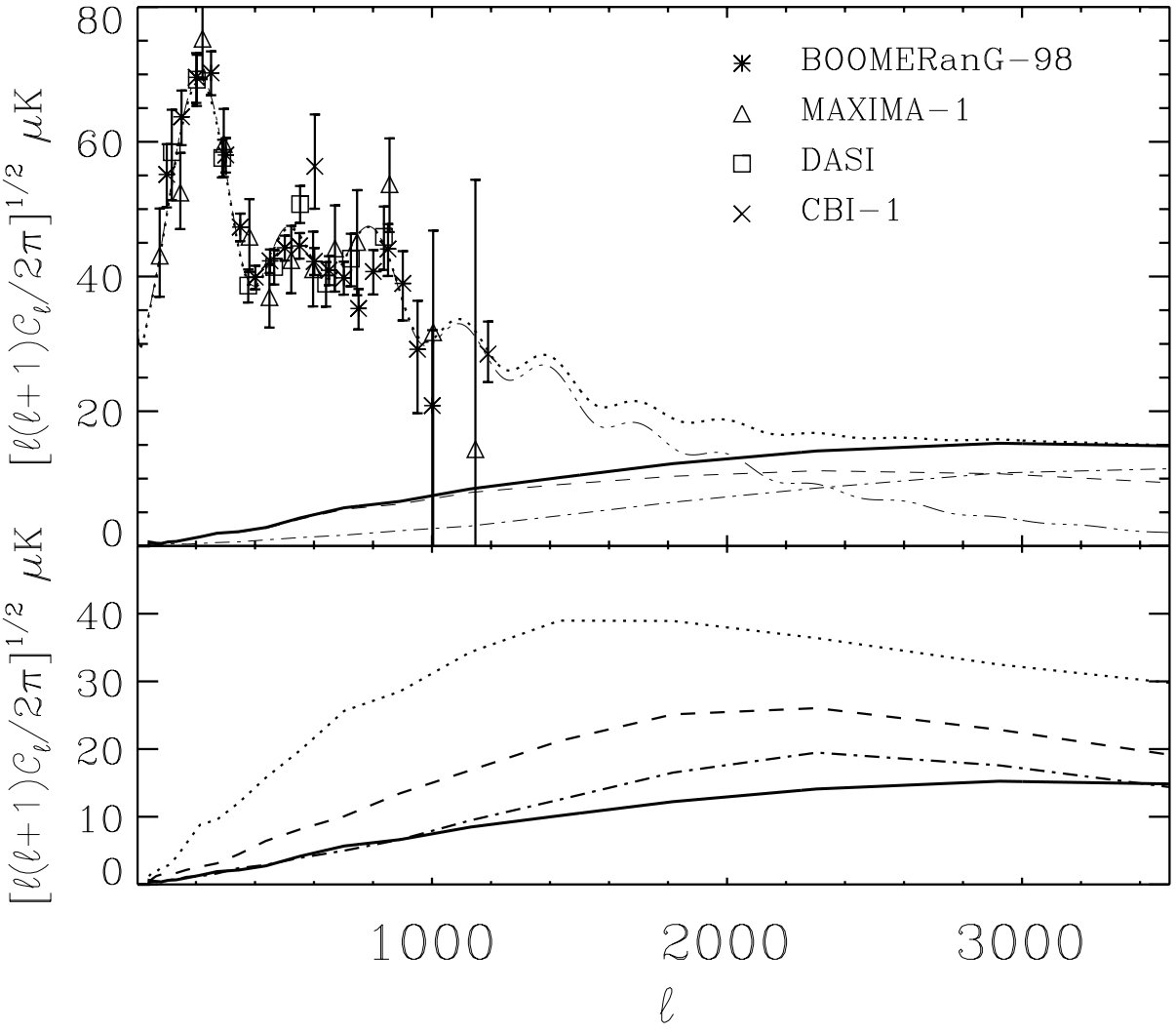
A possible contribution to CMB anisotropies at high ℓ from primordial voids Louise M. Griffiths [Visiting at]Astrophysics, UNSW, Sydney, NSW 2052, Australia lmg@astro.ox.ac.uk Martin Kunz Joseph Silk Astrophysics, University of Oxford, Denys Wilkinson Building, Keble Road, Oxford OX1 3RH, England

abstract We present preliminary results of an analysis into the effects of primordial voids on the cosmic microwave background (CMB). We show that an inflationary bubble model of void formation predicts excess power in the CMB angular power spectrum that peaks between $2000 < \ell < 3000$. Therefore, voids that exist on or close to the last scattering surface at the epoch of decoupling can contribute significantly to the total power in the region observed by experiments such as the Cosmic Background Imager (CBI).


BOOMERanG−98
MAXIMA−1
DASI
CBI−1
$[\ell(\ell+1)C_\ell/2\pi]^{1/2}\ \mu K$
$[\ell(\ell+1)C_\ell/2\pi]^{1/2}\ \mu K$
0
20
40
60
80
0
10
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